Trichinellosis

Public Health Fact Sheet

What is trichinellosis?

Trichinellosis, also called trichinosis, is an infection found in mammals, birds, and reptiles caused by a species of roundworm called *Trichinella*. In the first half of the 20th century, several hundred cases occurred annually in the U.S. due to consumption of raw or undercooked infected pork. Following eradication programs in the domestic pork industry, trichinellosis became rare in the U.S., with most cases associated with eating wild game. From 1997 to 2007 fewer than 11 cases a year on average have been reported in the U.S. In Oklahoma, only two cases have been reported to the Oklahoma State Department of Health since 1989. In 2008, California had an outbreak associated with a cultural event in which uncooked bear meat was consumed resulting in an increase in cases that year.

How are people infected with trichinellosis?

People become infected with *Trichinella* worms by eating raw or undercooked meat from animals infected with worm larvae. Trichinellosis is not spread from person-to-person. In the U.S., eating raw or undercooked game, such as wild boar, bear, and cougar, is most often the cause of infection in people. However, travelers to foreign countries with inadequate trichinellosis control programs should avoid eating undercooked pork and pork products. *Trichinella* is endemic in the pork populations of Argentina, Chile, and Mexico¹. Outbreaks have occurred in Europe from infected horse meat.

What are the symptoms of trichinellosis?

Trichinella infections can range from a mild flu-like illness to a severe, potentially fatal disease. The first symptoms of trichinellosis usually are nausea, diarrhea, vomiting, and abdominal pain. Other symptoms that may occur after initial symptoms are headache, fever, fatigue, chills, cough, eye swelling, aching joints, muscle pain, itchy skin, or constipation. These symptoms may last up to 8 weeks. Persons with severe disease may experience difficulty coordinating movements, and may develop heart and breathing problems. Most symptoms are mild or moderate in severity and will resolve within a few months. However, diarrhea, weakness, and fatigue may last longer. Death is rare but may occur in severe cases.

How soon after infection will symptoms appear?

Intestinal problems may begin within a few days, but the characteristic symptoms begin 5 to 45 days after eating undercooked or raw infected meat, in most cases symptoms occur within 8 to 15 days after exposure

How is trichinellosis diagnosed?

A blood test or muscle biopsy, performed by a physician, is used to diagnose trichinellosis.

Can I spread trichinellosis to others?

No. Infection only occurs by eating raw or undercooked meat containing *Trichinella* worms. Meat containing worms can cause infection unless cooked, frozen, or irradiated to kill larvae.

Is there treatment for trichinellosis?

Trichinellosis can be treated effectively with several prescription drugs. Treatment should begin as soon as trichinellosis is suspected.

What can be done to prevent trichinellosis?

Cook food to a safe internal temperature to kill any *Trichinella* larvae that may be present. Or cook until any pink fluid or pink flesh is not visible.

Cook pork roast and chops, and wild game to at least 160°F

Cook beef, veal, and lamb roast and steaks to at least 145°F

Cook ground beef, yeal, lamb, pork, and wild game to at least 160°F

Cook whole poultry to 180°F

Cook chicken breast to 170°F

Cook ground poultry to 165°F

- 2. Freeze pork less than 6 inches thick for 20 days at 5° F to kill worms.
- 3. Cook wild game thoroughly. Unlike species found in pork, some *Trichinella* in wild animals can survive freezing.
- 4. Clean meat grinders thoroughly between each use and avoid mixing ground meats from different animals.
- 5. Salting, drying, smoking, and microwaving meat alone does not consistently kill infective worms.
- 6. Do not allow hogs to eat uncooked carcasses of other animals, including rats, which may be infected with trichinellosis.

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